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## Many Ways to Give During the 2014 Combined Federal Campaign

*By Molly Porter*

The 2014 Combined Federal Campaign is underway at NASA's Marshall Space Flight Center. Marshall's goal is set at \$675,000, but this year's campaign team will be looking beyond the numbers.

"This campaign is about planting the seeds of giving, and giving more than just money," said Marshall's 2014 Combined Federal Campaign executive chair Markeeva Morgan from the Space Launch System Program Office. "When

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## Marshall's Magda Vargas 'Lending an Ear' to SLS Acoustic Testing

*By Megan Davidson*

Magda Vargas is "lending an ear" to better understand how noise affects a rocket on the launch pad. And that's quite an earful when it's for the most powerful rocket ever built -- NASA's Space Launch System.

When completed, SLS will be capable of taking a crew and cargo on deep space missions, including to an asteroid and eventually to Mars.



*Magda Vargas (NASA/MSFC)*

*See Magda Vargas on page 4*

# Johnson Center Director Ellen Ochoa to Speak at Marshall's Hispanic Heritage Event on Oct. 7

[NASA's Marshall Space Flight Center](#) will host a Hispanic Heritage Month observance on Oct. 7. The keynote speaker will be Dr. Ellen Ochoa, a former NASA astronaut, the first Hispanic female in space and current director of [NASA's Johnson Space Center](#).

The theme of this year's Hispanic Heritage Month is "Hispanics: A legacy of history, a present of action and a future of success." Scheduled activities during the event include sampling of various Latin and Hispanic foods, as well as live music.

The event will be from 10-11 a.m. at Marshall's Activities Building 4316, in collaboration with Team Redstone.

To learn more about Ochoa, please view her [NASA biography](#).



*Dr. Ellen Ochoa, director of NASA's Johnson Space Center (NASA)*

## Registration Opens for 2015 Mars Ascent Vehicle Centennial Challenge

*By Janet Sudnik*

Huntsville will be the host site of the inaugural NASA Centennial Challenges' Mars Ascent Vehicle Prize, which will take place April 7-12, 2015. The competition carries a prize purse of \$50,000 and will be held in conjunction with the NASA Student Launch event, an academic engineering design challenge that provides resources and experiences for students and faculty.

Also it will be the first Centennial Challenges competition to take place in Huntsville, where the program is managed at the Marshall Space Flight Center.

The MAV Prize will aid NASA in advancing technologies that could be used to return samples from Mars in the future. The challenge focuses on simulating the collection of samples from the Martian surface, placing them into Mars orbit for collection and returning them to Earth. This new challenge is open to both academic and non-academic teams to demonstrate technologies that may be relevant to potential future NASA Science Mission Directorate Mars missions. This challenge has no relation to NASA missions currently in development such as the Mars 2020.

"The MAV Prize is an opportunity for us to team up with

an established academic competition and invite teams of all kinds to work in parallel on technologies that will aid in future Mars exploration," said Sam Ortega, Centennial Challenges program manager.

The Challenge requires reliable, autonomous sample insertion into the rocket, launch of the rocket from the surface, and deployment of the sample container. Innovative technology from this competition could be considered in future planning for a Mars exploration mission.

The first-place award is \$25,000; second place is \$15,000; and third place is \$10,000. Competing teams will be eligible for prize money only after the successful completion of all the required tasks.

Interested teams may apply for the challenge by submitting a registration proposal to the Student Launch project office. For more information about the MAV Prize, visit [here](#).

*Sudnik, an ASRC Federal/Analytical Services employee, supports the Office of Strategic Analysis & Communications.*

# Ask an Expert: Stay 'Up All Night' to Watch the Oct. 8 Lunar Eclipse!

Join NASA experts on Oct. 8 to observe 2014's second total lunar eclipse. The eclipse will begin just after 3 a.m. and continue until sunrise. A map of world eclipse visibility is located [here](#).

NASA moon experts will be up all night on Oct. 8 to answer your questions. The live web chat begins at 2 a.m. and continues until sunrise. NASA will also conduct a live Reddit "Ask Me Anything" event on the afternoon of Oct. 7 beginning at 3 p.m. A live Ustream feed of the eclipse will be offered [here](#).



## CFC *Continued from page 1*

we consider giving to include all of our resources -- time, talent and treasure -- those seeds yield fruit beyond the formal CFC season each fall. Many organizations first just need us to show up."

Whether and how to give during this year's campaign is a personal choice. Even when contributing financially is difficult or simply impossible, there are many ways Marshall employees can choose to "show up" and make it possible during the 2014 season of giving.

### Give universally

For the 2014 CFC season, the Office of Personnel Management is launching Universal Giving. For the first time, donors nationwide can make a pledge to any of the charities that participate in the 151 CFC regions. For example, federal employees in the Tennessee Valley area who previously had access to approximately 2,600 charities will now be able to choose among more than 24,000 charities nationwide. Federal employees can identify charities using the [new online search feature](#) that allows them to search by charity name, keyword or tax code.

### Lend a helping hand

Community Service Days offer team members opportunities to volunteer their time and talents to support charities and special events throughout Huntsville and Madison County. More information about upcoming service projects is available to Marshall team members on the Community Service Days [online registration form](#).

### Get on the bus

Buses will start rolling Oct. 15 for morning and afternoon field trips to charitable organizations located near the Marshall Center. CFC bus tours offer Marshall

team members a behind the scenes look at how charities use their dollars to create real-world value at the local level. See the [bus tour schedule](#) for more information or to sign up.

### Cultivate a spirit of giving

This year campaign organizers are encouraging Marshall employees to find innovative ways to share their personal stories and volunteer activities during the campaign, whether as part of CFC or while helping others on their own. Here are a few ideas:

- Share a story about why or how you make it possible on the Tennessee Valley CFC's [Facebook](#) or [Twitter](#).
- Use the social media hashtag #makeitpossible when sharing photos, videos or other posts.
- Share pictures and video with Marshall team members on [ExplorNet](#).
- Make a fun video encouraging colleagues to "Make it possible!" in 2014.
- Take a team "selfie" at campaign-sponsored events or volunteer activity and post it to social media.
- Strike up a conversation with a friend about what it means to make it possible.

It's easy to forget the impact our stories can have on others. Whether a personal story about a difficult situation or learning experience, a family member's story about a benefit received, or someone else's story, often that story is the reason people give. The question is, "What's your story?"

The Marshall Center's 2014 CFC fundraiser runs through Dec. 5.

*Porter is a public affairs officer in the Office of Strategic Analysis & Communications.*



## Magda Vargas *Continued from page 1*

Vargas, an All Points Logistics, LLC acoustics analyst supporting the Engineering Directorate at NASA's Marshall Space Flight Center, is part of a team testing the noise levels generated by the SLS propulsion system and how the noise affects the vehicle using a 5-percent subscale model of the SLS and launch structures. Powerful noise from the engines and boosters can impact the rocket and crew, especially at liftoff. Data from the tests will help verify the rocket's design, and help develop an effective suppression system to stifle the sound.

"We collect noise data at different elevations and water suppression configurations through more than 200 sensors attached to the model," Vargas said. "I analyze that data that will be used for the rocket's sound suppression system." Water is the main component of the sound suppression system because it helps protect the launch vehicle and its payload from damage caused by acoustical energy.

"I worked for the Ford Motor Co. as a noise and vibration engineer early in my career, which I feel prepared me for my current job," Vargas said. "I've had the opportunity to test the noise generated by rocket motors of various sizes in horizontal and launch configurations. It's always impressive and exciting to see the rockets fire and the power they generate."

Vargas -- born and raised in San Juan, Puerto Rico -- earned a bachelor's degree in mechanical engineering from the University of Puerto Rico-Mayagüez in 2001 and a master's degree in the same field from the University of Michigan-Dearborn in 2004.

In her spare time, Vargas loves to travel and is currently on a salsa dance team. "Cooking also is a big passion of mine," Vargas said. "I enjoy making dishes from scratch. It's like an extension of engineering and science -- you're creating something out of nothing. You do a lot of testing and experimenting until you have the perfect finished product."

The first flight test of the SLS will feature a configuration for a 70-metric-ton (77-ton) lift capacity and carry an uncrewed Orion spacecraft beyond low-Earth orbit to test the performance of the integrated system. As the SLS evolves, it will



*A 5-percent scale model of the Space Launch System is ignited during a recent acoustic test at the Marshall Center. Marshall's Magda Vargas is part of a team that analyzes data from the tests, which will help verify the rocket's design and be used to develop an effective suppression system to stifle the sound. (NASA/MSFC/David Olive)*

provide an unprecedented lift capability of 130 metric tons (143 tons) to enable missions even farther into our solar system.

For more information on SLS, click [here](#).

*Davidson, an ASRC Federal/Analytical Services employee, supports the Office of Strategic Analysis & Communications.*

# Marshall Sounds the Alarm for Fire Prevention Week, Oct. 5-11

By Molly Porter

Does your smoke alarm work? NASA's Marshall Space Flight Center is partnering with the National Fire Protection Association during Fire Prevention Week, Oct. 5-11, to urge the Marshall family to make a life-saving move by pushing the "test" button on their home smoke alarms each month.

Smoke alarms save lives, but the simple task of making sure smoke alarms work is something people often forget. So this year's Fire Prevention Week campaign aims to remind people about the importance of working smoke alarms and testing them monthly.

"In a fire, seconds count," said Jason Scott, fire protection engineer for the Safety & Mission Assurance Directorate at Marshall. "Roughly half of home fire deaths happen between 11 p.m. and 7 a.m. when most people are asleep. Working smoke alarms can alert people to a fire before it spreads and give everyone enough time to get out."

While research shows that most U.S. homes have at least one smoke alarm, almost two-thirds of home fire deaths result from fires in homes with no smoke alarms or no working smoke alarms. Working smoke alarms cut the risk of dying in a home fire in half.

The National Fire Protection Association's 2014 Fire Prevention Week campaign promotes the following smoke alarm guidelines:

- Install smoke alarms in every bedroom, outside each separate sleeping area and on every level of the home, including the basement.
- Interconnect all smoke alarms throughout the home. This way, when one sounds, they all do.
- Test alarms at least monthly by pushing the test button.
- Replace all smoke alarms when they are 10 years old or sooner if they don't respond properly.
- Make sure everyone in the home knows the sound of the smoke alarm and understands what to do when they hear it.

"Marshall focuses on fire protection 365 days a year, not just during Fire Prevention Week," said Willie Love, a program specialist for the Safety & Mission Assurance Directorate.



*Sparky the Fire Dog, mascot for the National Fire Protection Association, teamed up with Marshall Center Director Patrick Scheuermann on Sept. 26 to promote the nationwide Fire Prevention Week campaign, "Working Smoke Alarms Save Lives: Test Yours Every Month!" (NASA/MSFC/Emmett Given)*

A team of fire protection experts and safety specialists works to protect lives and property year-round by identifying and managing fire risks across the center. For more information about fire protection, email Jason Scott or Larry Ziegler at [MSFC-FireProtection@mail.nasa.gov](mailto:MSFC-FireProtection@mail.nasa.gov).

To learn more about smoke alarms, visit the National Fire Protection Association's [Fire Prevention Week](#) website.

To find out more about Fire Prevention Week activities, visit the [Safety, Health and Environmental](#) community in ExplorNet.

*Porter is a public affairs officer in the Office of Strategic Analysis & Communications.*



# Pounding the Pavement: Run, Bike Event Draws Record Crowd; Half of the Racers 'Beat the Station'

*Paul McConnaughey, chief engineer for Exploration Systems Development at NASA, finishes the Racin' the Station Duathlon at the Marshall Space Flight Center on Sept. 27. Participants attempted to run 3.14 km, bicycle 23 km, and run another 3.14 km in the same amount of time -- a little over 90 minutes -- that it takes the International Space Station, traveling at 17,000 mph, to complete one orbit around Earth. McConnaughey was a relay partner with Steve Doering, director of Marshall's Office of Center Operations, who handled the cycling duties. The pair won the relay team category, beating 17 other teams -- and the station -- with a final time of just under 70 minutes. (NASA/MSFC/Emmett Given)*



*From left, Johnny Stephenson, deputy director of Marshall's Office of Strategic Analysis & Communications, and his daughter, Ari -- a senior engineering student at the University of Alabama in Huntsville -- chat with Lt. Gen. Patricia McQuiston, senior commander of Redstone Arsenal. During the opening ceremonies, McQuiston welcomed the 214 participants to the Racin' the Station Duathlon before joining them at the starting line as the cycling relay partner with her husband, retired Army Col. Leif Johnson. Exactly half the number who started -- 107 -- successfully "beat the station," completing the course in less time than it took the orbiting laboratory to complete one orbit of Earth. An additional 54 children raced on a specially designed short course. (NASA/MSFC/Emmett Given)*